

Prehistory of Chihuahua and Sonora, Mexico

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The "North American Southwest" includes much of Mexico as well as the southwestern United States. The area north of the international border has been studied intensively and its culture history is widely known; the portion south of the border has usually been ignored. This essay proposes a new term for the entire culture area, "Northern Mexico," and provides a summary of local sequences for two states in the region, Chihuahua and Sonora. The general sequence in the U.S. Southwest (Paleo-Indian, Archaic, and Ceramic periods) also holds in northwest Mexico. Preceramic occupations are poorly known. The Ceramic period saw the rise of a number of local cultures, which varied greatly in adaptation and social complexity. The basic culture pattern of Northern Mexico is derived from that of central Mexico, but direct Mesoamerican intervention in the region was apparently limited. While the issue of Mesoamerican-Northern Mexican relationships has dominated scholarly debate for decades, the greater need is to define and explain cultural variability within and between local sequences.

KEY WORDS: Chihuahua; Sonora; Casas Grandes; Northern Mexico.

INTRODUCTION

In prehistoric times, the "North American Southwest" (Ortiz, 1979, 1983) was dominated by village farmers whose lifeway was, to a large extent, derived from that of Formative Mesoamerica. Reaching an apparent demographic peak between A.D. 1000 and A.D. 1450, the region included a number of local cultures in Mexico and United States.

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Scholars have worked on both sides of the international border for over a century, but almost all their work has focused on the north side of the line. In fact, more archaeological fieldwork has been completed in the U.S. Southwest in a single recent year than has ever been done in the Mexican half of the region. Political division of the region has also led to the existence of two separate archaeological networks, each with its own leaders, literature, and cooperative structure. While there is some overlap in research efforts, it is embarrassing how little we know of each others' work.

There are at least two ways in which such divisions have crippled theory building in the United States. First, attempts to understand culture change as a process, using only sites from north of the border, have ignored relevant information from half the potential data base. Second, debates on the role of Mesoamerica in the region's culture history have tended to focus on data from central Mexico and the southwestern United States, avoiding the fact that the crucial answers will come from sites in the intervening area.

For those who wish to learn about the area, this essay provides a quick introduction to Chihuahuan and Sonoran prehistory. Other summaries are given by Johnson (1966), Di Peso (1966, 1974, 1979), Braniff and Felger (1976), Alvarez (1985), Montané (1985), and Guevara (1985). I have no dramatic breakthroughs to offer; the real need is for archaeologists to work on fundamentals, and what follows is a guide to that chore.

NOMENCLATURE

The term "Southwest" is itself part of the blind spot suffered by researchers. It has led many U.S. archaeologists to conclude that the region "slops over" in a minor way into Mexico, when at least half the culture area lies south of the border (Ortiz, 1979, p. ix, map). Other scholars, more aware of the true extent of the region, have simply extended the Southwest to include vast areas of Mexico (e.g., Cordell, 1984). Mexican archaeologists often find the term offensive, and also inaccurate: they contend that throughout the prehistoric period, the true axis of reference was between this region and central Mexico.

In a number of publications, Charles Di Peso lobbied for an alternative term, "Gran Chichimeca," to describe the region north of Mesoamerica. Unfortunately, the term is closely tied up with Di Peso's *puchteca* model of culture change (e.g., Di Peso, 1974, pp. 48–59), and has never gained wide acceptance.

I propose, instead, that scholars adopt "Northern Mexico" to describe the aboriginal culture area usually known as the Southwest (Cordell, 1984) or "Greater Southwest" (Riley, 1987). And, in the remainder of this essay,

I use Northern Mexico to describe the entire region covered in Ortiz (1979, 1983). Changing the name not only emphasizes the aboriginal and historical continuum between the culture area and central Mexico, but also reminds archaeologists that locations such as Chaco Canyon, far from being in the “heartland” of the Southwest, actually lie on the region’s northern margin.

GEOGRAPHY

For the purpose of a quick introduction, Chihuahua and Sonora can be divided into five geographic zones (Fig. 1). Brown (1982) provides an excellent starting point for a more detailed review of the natural setting. Locations named in this essay can be found on the National Geographic Society’s 1984 map of Mexico.

Zone 1 is the coastal lowlands of Sonora and northern Sinaloa, a basin-and-range setting with broad valleys and low intervening hills. Elevations commonly range from sea level to 1000 m. In most of Sonora, Zone 1 is Sonoran Desert; in the southern part of the state and in Sinaloa, subtropical thornscrub predominates. Most streams flow only after heavy storms, but the larger rivers (such as the Sonora, Yaqui, and Mayo) are perennial and form oases for human life.

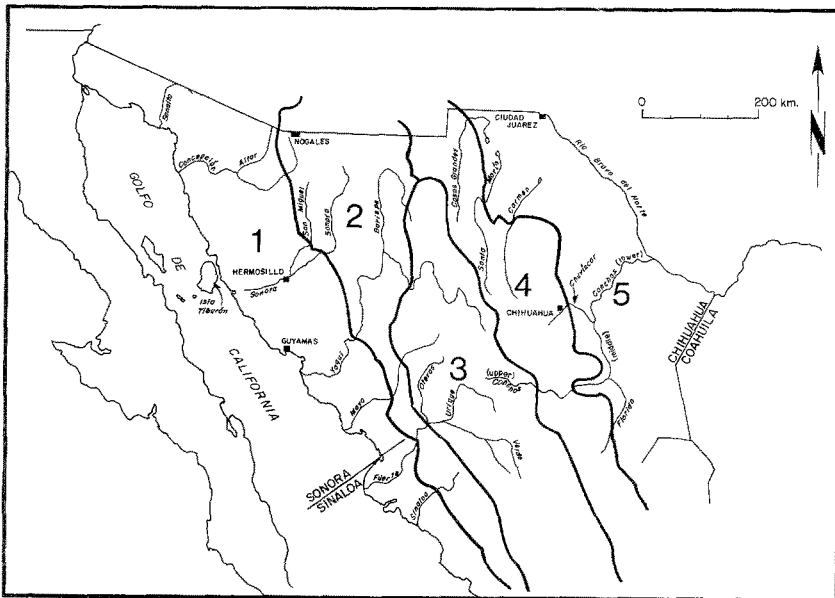


Fig. 1. Geographic zones of Chihuahua and Sonora, Mexico. See text for definitions.

Zone 2 is the western flank of the Sierra Madre Occidental. In northern Sonora it consists of basin-and-range topography, as in Zone 1, but the land is higher, the valleys are narrower, and the mountains are more prominent. Elevations of 1000 to 2000 m are common. Within each valley the main stream tends to be permanent, and irrigation farming is common. Lower elevations usually support semidesert grasslands (to the north) or thornscrub (to the south); hills are clad with oak and pine. Also known as the Serrana, this part of Sonora was a focus of prehistoric life.

In southern Sonora and northern Sinaloa, Zone 2 becomes a narrow belt of rugged hills. Subtropical thorn forest and deciduous forest predominate. Today farmers prepare slash-and-burn plots in the upper hills of this zone and plow small fields in the scattered bottom land.

Zone 3 is the Sierra Madre Occidental, a great uplifted block of tuff. The Sierra often has a flat skyline but is cut by rivers into a series of local ridges and canyons. In the deepest canyon bottoms an almost tropical climate prevails, but the crest of the Sierra is pine-clad and winter snows are common. Elevations are generally between 2000 and 3000 m.

Zone 4, in Chihuahua, is the Sierra's eastern flank. It is high basin-and-range country, with narrow valleys (some inward-draining) and prominent mountains. The basins tend to be grassland; the higher hills are covered with oak. Elevations are usually between 1500 and 2000 m.

To the east, Zone 5 is the Chihuahuan Desert, dominated by creosote brush. Basins are shallow, wide, and almost continuous; isolated ranges rise "like islands out of a sea" (Brand, 1937, p. 11). Many basins have no outlet; others drain into Chihuahua's great desert streams, the Río Conchos and Río Bravo del Norte (Río Grande). Elevations range between 600 and 1500 m.

There is an apparent symmetry to the region, as imposed by the Sierra Madre Occidental. The outer zones of northwest Mexico (Zones 1 and 5) are desert lowlands, occupied mainly near major streams. On each flank of the Sierra, the hilly uplands (Zones 2 and 4) were heavily populated in prehistoric times, especially where irrigation could be practiced. Finally, the Sierra itself (Zone 3) was a high, rugged mountain mass that supported prehistoric farmers but also formed a partial barrier between populations to the east and those to the west.

PALEO-INDIAN PERIOD

In northwest Mexico, the preceramic occupation is poorly known and must be interpreted using sequences in the United States (Table I). Hayden (1976a, b) has argued for a preprojectile point horizon (30,000 to 11,500 B.P.) in the Sierra Pinacate area of northwest Sonora, but his evidence is

Table I. Major Periods and Named Complexes of the Chihuahua-Sonora Area

| Period/complex | Location | Approximate dates |
|----------------------------|--------------------------------|-----------------------------|
| Paleo-Indian period | | 11,500-9000 B.P. |
| Clovis | Sonora, Chihuahua | 11,500-11,000 B.P. |
| Folsom | Durango | 11,000-10,000 B.P. |
| San Dieguito | Far Northwest Sonora | 11,000-9000 B.P. |
| Archaic period | | 10,000 B.P.-A.D. 300 |
| Peralta | South Coastal Sonora | 3500 B.P.?-A.D.? |
| Phase I of Bowen | Concepción Basin | 3500 B.P.?-A.D. 200? |
| Amargosa | Far Northwest Sonora | 7000 B.P.-A.D. 300 |
| Los Caracoles | Durango | 3000 B.P.-A.D. 1 |
| Ceramic period | | A.D. 1-1700 |
| Casas Grandes | Northwest Chihuahua | A.D. 600-1450 |
| Jornada Mogollon | Northeast Chihuahua | A.D. 900-1450 |
| La Junta Area phases | Southeast Chihuahua | A.D. 1200-1580 |
| Loma San Gabriel | Durango and Southern Chihuahua | A.D. 1-1350 |
| Huatabampo Culture | Southern Coastal Sonora | A.D. 700?-1000? |
| Seri Area | Central Coastal Sonora | A.D. 700-1700 |
| Rio Sonora Culture | Eastern Sonora | A.D.?-1550 |
| Phases II-IV of Bowen | Concepción Basin | A.D. 200?-1450 |
| Amargosa III of Hayden | Far Northwest Sonora | A.D. 300-1700 |
| Historic period | | A.D. 1540-Present |
| Spanish Colonial | | A.D. 1540-1820 |
| Mexican | | A.D. 1820- |

problematic. The earliest clearly documented occupation was by Clovis hunters, whose distinctive points have been found many times in Sonora (Di Peso, 1955; Robles and Manzo, 1972, Montané, 1985). Based on U.S. Clovis studies (Cordell, 1984), these sites were used between 11,500 and 11,000 B.P. Clovis sites are almost all at lower elevations. Recent excavations by the French archaeological mission, as yet unpublished, have reportedly yielded tools in association with the remains of a mammoth.

Clovis remains appear to be much less common east of the Sierra Madre. There is one known Clovis point from Chihuahua (Di Peso, 1965) and a possible example from Durango (Lorenzo, 1953).

A single Folsom point fragment hints at continued Paleo-Indian use of Chihuahua after 11,000 B.P. (Aveleyra, 1961). Paleo-Indian human remains have not been found in the region, with the possible exception of the Chinobampo skull from southern Sonora (Aveleyra, 1964).

In the Pinacate area of northwest Sonora, Hayden (1967, 1976a, b) located sites of the San Dieguito culture, which was first defined in California and southwest Arizona. According to Hayden, this occupation included the use of marine resources of the Golfo de California.

It thus appears that at the end of the Pleistocene, northwest Mexico was home to the same bands of hunters who ranged through much of the western United States. However, we lack independent data on the age of the sites, on their functions, and on local adaptive variations. In northwest Mexico, Paleo-Indian research must be considered an almost virgin field.

ARCHAIC PERIOD

Based on sequences in the United States, this period began after 11,000 B.P. and ended in most places by roughly A.D. 200. However, in parts of Sonora and Chihuahua, farming never replaced foraging as a way of life.

In previous years, Archaic remains from Chihuahua and most of Sonora were often simply compared to those of the Cochise Culture of southern Arizona (e.g., Fay, 1967). Such studies demonstrated only that the artifact assemblages were broadly similar and begged the question of local variation. MacNeish and Beckett (1987) have taken a fresh approach, defining an "Archaic Chihuahua Tradition," with its own adaptive and developmental patterns, for parts of Chihuahua, New Mexico, and west Texas. Unfortunately, their work is based primarily on excavations in southern New Mexico, and the authors do not specify why the complex extends into Chihuahua. Thus, once again, we lack published data on the Archaic period in northwest Mexico.

A few other studies are worth noting. Polly Schaafsma's (1980) study of regional rock art indicates that several Archaic styles occur in, or extend into, Northern Mexico. Archaeologists have also identified several examples of local Archaic adaptations. In the northern Sierra Madre of Chihuahua, Lister (1958) found late Archaic remains that were probably ancestral to the Casas Grandes occupation of the same mountains. Farther south, in Durango, Spence (1971) identified the Los Caracoles complex as an Archaic culture directly ancestral to Loma San Gabriel. And in the Concepción drainage of Sonora, Bowen (1976a) has defined a "Phase I" Archaic occupation ancestral to the Trincheras culture.

In northwest Sonora, remains continued to resemble those of southern California and southwest Arizona, being attributable to the Amargosa complex (Hayden, 1967, 1976a). The same people may have created some of the "geoglyphs" of northwest Sonora (Hayden, 1982; Montané, 1985), although the dating of such figures is uncertain.

Based on these and other studies, Archaic peoples occupied the whole of the Sonora-Chihuahua area, with adaptations that varied greatly over space as well as time. Site locations indicate that desert, lake, mountain, and even

coastal resources were being used (Brand, 1943; Marrs, 1949; Lister, 1958; Ives, 1963; Bowen, 1976b). To understand this variability, we must move beyond viewing northwest Mexican Archaic patterns as mere extensions of their better-known U.S. counterparts.

CERAMIC PERIOD OF CHIHUAHUA AND NORTHERN DURANGO

After 250 B.C., groups in northwest Mexico adopted the use of pottery, passing the secrets of its manufacture northward; within four to five centuries, the craft reached Arizona and New Mexico. As part of this process, complex Mesoamerican vessel shapes (such as tripod dishes) were rejected in favor of simple jar and bowl forms. The distinction between complex and simple vessel shapes is a crude but useful way to mark the boundary between Mesoamerica and Northern Mexico. A better understanding of the same boundary is badly needed, but such a task is beyond the scope of this paper.

Southern Chihuahua: The Loma San Gabriel Area

Beyond the border of Mesoamerica, Durango and western Zacatecas were the home of several Northern Mexican complexes. These are poorly known except for Loma San Gabriel, defined through the work of J. Charles Kelley (1956, 1971; M. Foster, 1985). Loma San Gabriel emerged between 200 B.C. and A.D. 200 and was derived from the local Los Caracoles Archaic population (Spence, 1971; Kelley, 1971; M. Foster, 1986). Loma San Gabriel sites occur in western Zacatecas, in Durango as far west as the edge of the Sierra Madre, and north to the upper Río Conchos in Chihuahua (Fig. 2).

Loma San Gabriel sites were mostly small hamlets and villages based on foraging and farming (Brooks *et al.*, 1962; M. Foster, 1984). The primary crops were maize and beans. Sites were usually built on elevated points overlooking arable land and sources of water; defense was most likely a factor in site selection. The same settlement pattern was found among the early U.S. Mogollon, who probably adopted it from Loma San Gabriel (cf. M. Foster, 1982). So far, the only known "Loma" structures are surface rooms, not pithouses (M. Foster, 1986). Caves were also used, for habitation and for burial (Brooks and Brooks, 1978). Pottery consisted of simple jars and bowls of plain, red, white, and red-on-brown design (M. Foster, 1985).

Around A.D. 200, the Mesoamerican Chalchihuites culture began expanding into Loma San Gabriel territory in western Zacatecas. By A.D. 900

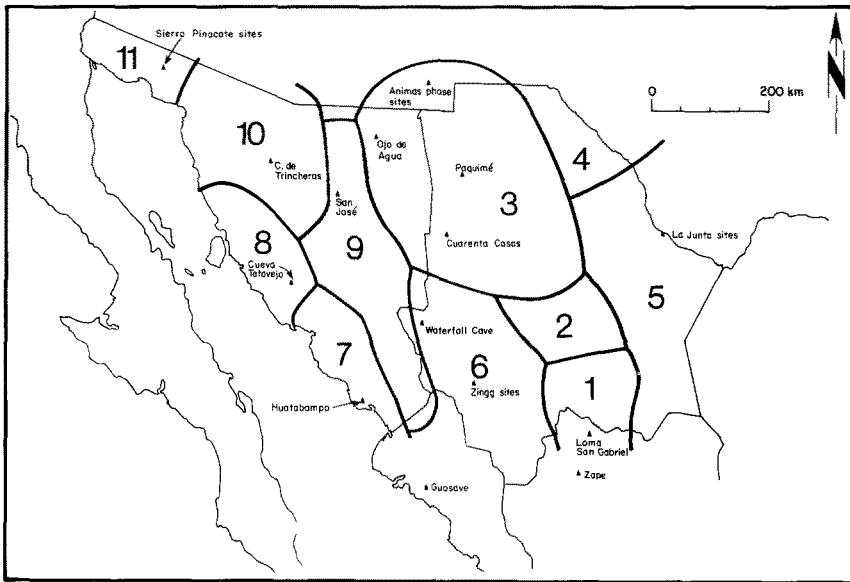


Fig. 2. Archaeological areas of Chihuahua and Sonora, Mexico. 1, Southern Chihuahua (Loma San Gabriel); 2, Central Chihuahua; 3, Northwest Chihuahua (Casas Grandes); 4, Northeast Chihuahua (Jornada Mogollon); 5, Southeast Chihuahua; 6, Southwest Chihuahua; 7, Southern Coastal Sonora and Northern Coastal Sinaloa; 8, Central Coastal Sonora (Seri); 9, Eastern Sonora (Río Sonora); 10, Concepción Basin (Trincheras); 11, Far Northwest Sonora. All boundaries are tentative.

to 1000, Guadiana Branch Chalchihuites sites were established in Durango as far north as El Zape. The culture disappeared about A.D. 1450 (Kelley, 1971, 1985b). Loma San Gabriel persisted throughout the Chalchihuites intrusion, adopting some traits from the latter culture, and may have become the historic Tepehuan (Riley and Winters, 1963). However, the archaeological record grows dim after A.D. 1350 to 1450 (M. Foster, 1982, p. 258).

For Loma San Gabriel, the biggest challenge is to define phases within the general sequence (M. Foster, 1986, p. 9). At present, all sites from a 1200- to 1600-year sequence must be lumped, making it impossible to discuss local processes of culture change.

Central Chihuahua

As defined here, central Chihuahua is the portion of Zone 4 between the upper Río Conchos and a line connecting Ciudad Guerrero, Cuauhtémoc, and Chihuahua. West of the middle Conchos, published research appears to be limited to reconnaissance surveys by Sayles (1936b), Brooks (1971), and

possibly Hewett (1908). Together, these reports allow a negative definition of central Chihuahua as an area where people used only plainware pottery and left no obvious architectural remains. Fieldwork is desperately needed in this area, if only to establish whether there is a continuity of settlement between the Loma San Gabriel area to the south and the Casas Grandes area to the north.

Northwest Chihuahua: The Casas Grandes Area

The best single source of information on the archaeology of northwest Mexico comes from the work of Charles Di Peso and his colleagues (Di Peso, 1974; Di Peso *et al.*, 1974) in the Río Casas Grandes valley, especially at the site of Casas Grandes or Paquimé. Unfortunately, Di Peso's chronology is clearly wrong, and various alternatives have been proposed (LeBlanc, 1980; Lekson, 1984; Braniff, 1986; Dean and Ravesloot, 1988). While this is not the place for a full review of the issue, the key problems can be noted. First, the tree-ring samples from Paquimé yielded noncutting dates; Di Peso used the results as near-cutting dates but decades of rings were missing from each sample (Dean and Ravesloot, 1988). Second, Di Peso used uncalibrated radiocarbon dates to bolster his view of the tree-ring data. Third, Di Peso was aware that ceramic cross-dates were at odds with his proposed Casas Grandes sequence, but he simply rejected the contradictory evidence.

Table II provides Di Peso's chronology, along with a revision based on ceramic cross-dating. The known Casas Grandes sequence probably begins

Table II. The Casas Grandes Sequence

| Period/phase | Di Peso dates | Alternative dates |
|--------------------------------|----------------|-----------------------|
| Viejo period | | |
| Convento phase | A.D. 700–900 | Pre-A.D. 600–A.D. 975 |
| Pilon phase | A.D. 900–950 | A.D. 975–1075 |
| Perros Bravos phase | A.D. 950–1060 | A.D. 1075–1150 |
| Medio period | | |
| Buena Fe phase | A.D. 1060–1205 | A.D. 1150–1300 |
| Paquimé phase | A.D. 1205–1261 | — ^a |
| Diablo phase | A.D. 1261–1340 | — ^a |
| Tardío period | | |
| Robles phase | A.D. 1340–1519 | — ^b |
| Sporadic Spanish Contact phase | A.D. 1519–1660 | — ^c |
| San Antonio de Padua phase | A.D. 1660–1686 | A.D. 1660–1686 |

^aThe Paquimé and Diablo phases, taken together, probably lasted from A.D. 1300 to no later than A.D. 1450.

^bThese sites are Medio period sites.

^cNo archaeological basis for this phase.

at A.D. 500 to 600, although village farmers were probably in the area before then. During the Convento phase and Pilón phases (A.D. 600 to 1075) of the Viejo period, Casas Grandes sites were clearly part of the Mogollon culture pattern that is best known from work in Arizona and New Mexico. Sites were small valley-bottom pithouse villages; ceremonial houses were present and may have played a role like that of great kivas. Pottery included red-on-brown and textured brown varieties. Pilon phase burials began to include grave goods, which may indicate a growing concern with social status (Di Peso, 1974).

In the Perros Bravos phase (A.D. 1075 to 1150), houses became rectangular surface structures in clusters of two or three; the houses were joined by wing walls to form small plaza-like areas. At the type site, the ceremonial round house continued in use. Local pottery resembled the simple styles of earlier phases, but trade wares (notably Mimbres Classic Black-on-white) became evident. Copper artifacts were present, reflecting the emergence of an important local craft (Di Peso, 1974). Even so, the Perros Bravos phase gives no hint that the Casas Grandes valley was about to become a major social center.

Based on ceramic cross-dating, the subsequent Medio period lasted from A.D. 1150 to 1450. Using tree-ring data, Dean and Ravesloot (1988) put the start of this period closer to A.D. 1200. The 50-year difference is important: if the Medio period began about A.D. 1150, its emergence might be related to the collapse of Classic Mimbres society, while at A.D. 1200 the simultaneous emergence of the Buena Fe and El Paso phases would most likely reflect a shared common social or economic process.

The hallmark of the Medio period is a series of often stunning polychrome pottery types (Sayles, 1936a; Di Peso and others, 1974). During the Buena Fe phase (A.D. 1150–1300), Paquimé first became a social center. About 20 house clusters were built of puddled adobe; architectural elements included T-shaped doorways, raised hearths, alcove platforms, stairways, and colonnade-type entries with square adobe columns. A canal provided domestic water (Di Peso, 1974). Contreras (1985) has described construction techniques used at the site.

During the Paquimé-Diablo phases (A.D. 1300–1450), earlier house clusters were abandoned or rebuilt, and a new town plan emerged. The site centered on a plaza surrounded by multistoried structures and included ceremonial mounds and an I-shaped ballcourt. During the latter part of this period (Di Peso's Diablo phase), some breakdown in social leadership may have taken place; villagers moved into the massive central structures and subdivided the rooms. Even so, craft production and macaw raising continued (Di Peso, 1974).

If Paquimé was an impressive site, it was nonetheless on a Northern Mexican scale. Di Peso and co-workers (1974, pp. 198, 207) estimated that

the peak population was 4700 in a space of 36 ha. Most dominant centers in Mesoamerica were substantially larger; early Postclassic Tula, for example, may have included 60,000 persons in 12 square km (cf. Sanders and others, 1979).

Paquimé was apparently sacked around A.D. 1450 (Di Peso, 1974). Some archaeologists have questioned this apocalyptic ending (e.g., Ravesloot, 1988, p. 76), but there is evidence that the town was burned, with the dead left where they fell.

Di Peso (1974) believed that the Casas Grandes culture survived the disaster and lingered on in the northern Sierra Madre (as the Robles phase) until the time of initial Spanish contact. The remnant population supposedly lived in pueblos or cliff dwellings and continued to make the distinctive Casas Grandes polychrome types. However, careful evaluation of the "Robles phase" data provided by Di Peso and others (1974) suggests that the sites in question date to the Medio period. It therefore appears that the collapse of Paquimé led to general abandonment of the area.

Although Paquimé was clearly the heart of the Casas Grandes culture, it was one site among hundreds in an interaction sphere that emerged at or soon after A.D. 1150. In the larger valleys, subsistence was based on irrigation farming. In the mountains, terraces were placed along lower slopes and in valley bottoms to trap silt and runoff for "dry" farming (Di Peso, 1974; Leubben *et al.*, 1986; Schmidt and Gerald, 1988).

The extent of the Casas Grandes sphere can be pieced together from various reports. To the north, the sphere included the Animas phase sites of southwest New Mexico (DeAtley, 1980; DeAtley and Findlow, 1980) and southeast Arizona (Douglas, 1987). To the west, it took in the whole of the Sierra Madre down to the Madera area (Lister, 1958; Guevara, 1986) and extended to the Bavispe drainage (Amsden, 1928; Braniff, 1985, 1986). Within these areas, architecture and pottery tend to be fairly uniform. Houses incorporated puddled adobe walls, T-shaped doorways, and raised hearths. In the Sierra Madre, cliff dwellings were built where overhangs were present (Lister, 1958; Guevara, 1986); otherwise, pueblos (ranging in size from one room to scores of rooms) were common (Carey, 1931; Brand, 1935; Sayles, 1936b). Sites may have been linked by a system of foot trails and hilltop fire-beacons (Di Peso, 1974).

In the Chihuahuan foothill zone, Casas Grandes pottery occurs south to a line drawn through Guerrero, Cuauhtémoc, and Chihuahua (Brooks, 1971; cf. Brand, 1935). Within this zone the Babícora valley (east of Madera) was a local population center, with ceramic ties to the sites in the adjacent Sierra Madre. To the east, Casas Grandes remains are present in the valleys of the Río Santa Maria and Río el Carmen (Brand, 1935; Sayles, 1936b).

Paquimé was a central distribution point for shell jewelry and the feathers of macaws and turkeys, and ceremonies at the town included public feasts of roast agave (cf. Minnis, 1988). Medio-period polychromes were common throughout the interaction sphere, but it is not clear whether these were produced centrally (Braniff, 1985) or locally (DeAtley, 1980). At the heart of this network was a social hierarchy, as confirmed by Ravesloot's (1988) study of Paquimé mortuary customs.

The appearance and subsequent collapse of Medio period Casas Grandes are a puzzle. For Di Peso (1974), this pattern of rise and fall was linked, through trade, to events in the Toltec world of early Postclassic Mesoamerica. We now know, however, that the Casas Grandes florescence occurred after the end of Toltec dominance (Braniff, 1986; Dean and Ravesloot, 1988). Kelley (1986b) suggests that the link was instead with the Aztatlán culture of Sinaloa. However, the pattern of rapid florescence and collapse occurred so many times in Northern Mexico that it must reflect a regional process, and not intervention and withdrawal by outside groups.

Northeast Chihuahua: The Jornada Mogollan Area

Northeast Chihuahua consists mainly of desert, including a large belt of dunes, or *médanos*, south of Ciudad Juárez. This portion of the state was occupied by the Jornada Mogollon (Lehmer, 1948); to interpret the occupation, we must draw on research in the United States. Prehistoric life focused on the Río Bravo, where permanent farming villages were found, but sites are also present away from the river.

The Ceramic period of northeast Chihuahua may have begun as early as A.D. 200, emerging from an established Archaic lifeway (MacNeish and Beckett, 1987). Local occupation peaked with the El Paso phase (A.D. 1200–1450), which was related—in ways yet unclear—to Medio period Casas Grandes (C. Schaafsma, 1979). The area was then abandoned, being used in contact times by nomadic foragers.

Southeast Chihuahua

According to Kelley (1952, 1985a, 1989), the Jornada Mogollon farmers who lived in northeast Chihuahua spread down the Río Bravo as far as the vicinity of El Mulato, about A.D. 1150 to 1250, and also colonized the Río Conchos below El Pueblito. Known as the La Junta phase, this local occupation lasted until A.D. 1400 or 1450. Habitation sites include rows of surface rooms, rectangular pithouses (e.g., Kelley, 1951), and a few oval or circular

pithouses. Other sites, found along the Río Bravo, consist of ring middens and hearths, scattered stone artifacts, and Jornada Branch and Casas Grandes pottery (Kelley, 1989).

In past years, Kelley (1952, 1986a) maintained that although much of Chihuahua was abandoned about A.D. 1450, the La Junta phase occupation continued into historic times. However, based on recent studies in west Texas, Kelley now believes that the La Junta sites may have been abandoned along with the Casas Grandes and El Paso phase Jornada areas. The area was subsequently occupied by protohistoric nomads (the Concepción phase) who were subsequently reduced and missionized [the Conchos phase (Kelley, 1989)].

On the Río Conchos above El Pueblito, Kelley (1956) has documented a complex that may have been produced by protohistoric Conchos Indians (Kelley, 1989). This "Río Conchos culture" extended upstream along the Conchos and the Río Florido as far as Villa Ocampo, into the areas defined earlier in this essay as central and southern Chihuahua. Small sites occur at intervals along the rivers, primarily at or near the mouths of tributary streams. Pottery is plain red or brown, rarely red-on-brown; stone artifacts typically include end-notched pebble net-sinkers, which indicate a reliance on fishing. (Such sinkers also occur in the La Junta area.) Buried more deeply in the same river terraces are traces of an earlier, preceramic occupation (Kelley, 1956, 1989).

We know little about the bolsons of southeast Chihuahua. In historic times, these desert basins were home to nomads who bedeviled Spanish and Mexican settlements. Similar groups were present in the post-Archaic period (e.g., Mallouf, 1987), but so far they are very poorly documented.

Southwest Chihuahua

This portion of the Sierra Madre (the headwaters of the Mayo, Fuerte, and Sinaloa rivers) includes Mexico's famed Barranca de Cobre. It is surprising how little research has been done, even considering the ruggedness of the area.

In southwest Chihuahua, burial caves have been emphasized to the exclusion of other site types. Humans were generally interred with their clothing and wrapped in reed mats (e.g., Tyson and Elerick, 1985). Caves were also used for habitation. Looting of these sites has yielded a number of impressive textiles (Mera, 1943; O'Neale, 1948; Phillips, 1987). Other studies (Lumholtz, 1902; Zingg, 1940; Ascher and Clune, 1960; Phillips, 1987) indicate that caves were also used prehistorically for habitation, temporary camps, or food storage, sometimes including structures for those

purposes. Open-air sites, possibly representing small villages, were also present.

Some ceramic variability may be present within the area. In the upper Mayo drainage, Ascher and Clune (1960) found decorated pottery inspired by that of Casas Grandes. In the vicinity of the Barranca de Cobre, pottery may have been limited to plainwares or simple decorated wares (Zingg, 1940; Phillips, 1987).

Nothing can be said for the Tepehuan country farther south (the Verde and Loera drainages) because, apparently, no archaeologist has ever reported on the area.

CERAMIC PERIOD OF SONORA AND NORTHERN SINALOA

By the third century A.D., much of Sonora and northern Sinaloa was marked by *rancherías* (scattered hamlets) or small villages based on mixed farming and foraging. The exception was the drier part of Sonora (the central and northwest coastal areas), where exclusive foraging economies lasted into historic times.

It appears that pottery-making reached Sonora before A.D. 250 (Pailes, 1972), but the logical origins of this craft are obscure. Sonoran pottery may have been an offshoot of the brown wares that spread up the east flank of the Sierra Madre (the Loma San Gabriel, Casas Grandes, and U.S. Mogollon ceramic traditions). Or there may have been a second corridor of ceramic diffusion on the west side of the Sierra, through northern Sinaloa and the foothills of Sonora (including the Trincheras and Hohokam traditions). The issue is an important one, as pottery marks the networks along which other early innovations must have spread.

South Coastal Sonora and North Coastal Sinaloa

This area consists of the coastal lowlands between Cabo Haro and the Río Fuerte. The dominant local complex is the Huatabampo culture, which probably began before A.D. 700 and lasted until about A.D. 1000 or later (McGuire and Villalpando, 1989). The complex is poorly known except for its artifact assemblage, which includes plain brown and red wares, ceramic figurines, and carved shell (Ekholm, 1939, 1940; Alvarez, 1982, 1985).

Huatabampo sites occur on the coastal plain from the Río Fuerte to the Río Mayo (McGuire and Villalpando 1989). Based on work at Machomoncobe (Alvarez, 1982, 1985), local villages included structures of perishable materials, open-air activity areas, trash dumps, burial areas, and

caches of offerings. The same study indicates that the subsistence pattern was a broad one, based on farming (of maize and beans), on coastal resources such as fish and shellfish, and on foraging and hunting.

By A.D. 700 or 750, Mesoamerican settlements began to spread north along the Sinaloa coast. Known as the Aztatlán complex (Sauer and Brand, 1932; Kelley and Winters, 1960; Meighan, 1971), these settlements reached as far as the Río Fuerte. However, after A.D. 1400 or 1450 the Mesoamericans were in retreat, and at the time of Spanish contact the frontier lay at Culiacán to the south.

Between the Río Mayo and Cabo Haro, the local prehistory is even more poorly understood. The lower Yaqui valley is an archaeological blank. In the Guaymas area, coastal sites yield a thick brown ware. The age of these sites is unknown, but they may be related to the historic Yaqui (Bowen, 1976b, pp. 110–115).

Central Coastal Plain: The Seri Area

This low desert area extends from Cabo Haro to just south of Puerto Libertad and inland as far as Hermosillo. The best data are from sites on the actual coast and on Tiburón and San Estevan islands. Inland rockshelter sites also exist (Bowen, 1976b; Taylor, n.d.).

The known ceramic sequence begins as early as A.D. 700 or 800 with the appearance of Tiburón Plain, a remarkably thin ware sometimes called “eggshell pottery.” The same ware was produced until about A.D. 1700, when (with some modification) it became historic Seri pottery (Bowen, 1976b). It is tempting to conclude that the Seri have occupied the area, with very little change, for over a thousand years.

Central coast material culture was simple; besides pottery it included basic stone tools and shell ornaments. Subsistence was based on a mix of land and marine foods (Bowen, 1976b). Many sites are dunes with mixed-in shell and trash; using the historic Seri as a model, houses were flimsy and highly perishable affairs built near the shoreline (Bowen, 1976b, pp. 34–36). Such structures would leave no trace in the archaeological record.

It is not clear how far inland the Seri extended during prehistoric times; in the Historic period, at least part of the area was used by fairly sedentary Pimans. One glimpse at the answer is provided by work at Cueva Tetavejo (Taylor, n.d.), about 50 km south of Hermosillo. The cave was a living site, with burials also present. Pottery included a thin ware like that of coastal sites but, also, thicker sherds of unknown origin. A few Trincheras Purple-on-red sherds were found. Based on the Tetavejo data, along with site survey

information (Braniff, 1985), it is conceivable that in prehistoric times the entire central coastal plain was Seri territory.

Eastern Sonora: The Río Sonora Area

The Río Sonora culture, originally defined by Amsden (1928), was usually ignored by archaeologists prior to the work of Richard Pailes (1972, 1976, 1978, 1984). In terms of human ecology, the Río Sonora culture filled the "niche" provided by geographic Zone 2 (Pailes, 1978). Here, villagers were able to maintain a sedentary lifeway based on irrigation and other farming techniques.

The Río Sonora culture extends as far north as the Cananea area and as far south as the Río Fuerte in Sinaloa. Farther south, Sauer and Brand's (1932) Tacuichamona Culture may be a related complex. Within this long strip of territory, common architectural elements, ceramic styles, and settlement patterns define the tradition (Pailes, 1978).

Both pithouses and surface structures were built. Surface house remains usually consist of rows of rocks, outlining the foundations of rectangular adobe structures. At the south end of the culture range, some rough masonry structures occur on high mountain benches overlooking valleys. Almost all the pottery is brown ware; decorated forms were incised, punched, or corrugated, and resemble Casas Grandes and U.S. Mogollon varieties (Pailes, 1978).

The settlement pattern consisted of *rancherías*, developing through time to include hamlets and larger villages. Sites were usually located on terrace edges or other high points along the larger streams, reflecting an emphasis on valley-bottom farming. The exception is in upper foothill settings in the southern range of the culture, where "dry" farming is possible; here, sites are more widely dispersed (Pailes, 1972, 1978).

Pailes's developmental sequences for the south and north ends of the Río Sonora culture area are somewhat different, reflecting local variation but possibly also differences in approach and available data. Based on radiocarbon and obsidian hydration dates from Cueva de Colmena, southeast of Navojoa, the defined sequence for the southern foothills begins about A.D. 250. Sites were small and widely spaced and were probably used by single families; material culture was simple and included coarse plainware pottery (Pailes, 1972, 1976, 1978).

After A.D. 700, the local occupation split into lower foothills (Cuchujaqui phase) and upper foothills (Los Camotes and San Bernardo phases) variants, a pattern that lasted until historic times. One major difference seems to have been that lower foothills groups had fairly close contacts with coastal

cultures, while groups in the upper foothills were more isolated. It also appears that through time, hamlets or small villages emerged in the upper foothills (Pailes, 1972, 1976, 1978).

In the north end of the culture range, based on data from the Río Sonora valley itself, the known pattern (Pailes, 1978, 1984; Doolittle, 1984, 1988) is quite different. A farming lifeway was most likely present well before A.D. 1000, but there is little hard information to support this belief. Our first substantial information comes from the "middle phase" (Pailes, 1984) or "early phase" (Doolittle, 1988), which lasted from A.D. 1000 to 1150 or 1200. Habitation sites generally consisted of pithouses overlooking the floodplain of the river or of major tributary arroyos. Most sites had one to eight rooms, although two "hamlets" and one large village (the San José site) were present (Doolittle, 1988).

About A.D. 1150 to 1200, people in the Río Sonora valley began building surface structures with aligned rock foundations, although pithouse construction continued after that date. Pailes (1984) classifies all mixed (pithouse and surface room) sites and surface-room sites as "late phase" (A.D. 1150 or 1200 until 1550); Doolittle (1988) divides the post-pithouse period into a "transitional phase" (mixed structures; A.D. 1200–1350) and a late phase (mostly surface structures; A.D. 1350–1550).

In any case, after A.D. 1200 there is a clear tendency toward a more elaborate social and political system (Doolittle, 1988). A clear settlement hierarchy emerged, ranging from single houses and small hamlets to local centers (one with over 160 houses, another with over 200). At the largest sites, multistoried adobe structures and ball courts were built. A few defensive hilltop sites are also present in the valley. Trade pottery (from Casas Grandes and southern Arizona), marine shell ornaments, and copper tinklers were imported (Pailes, 1984; Doolittle, 1988).

It is clear that despite a lack of spectacular ruins, a social florescence took place in the northern Río Sonora culture area as it had in other parts of Northern Mexico. This florescence lasted into historic times: using early Spanish documents, Riley (1987) has defined a series of local "statelets," small political units that were nonetheless hierarchical, territorial, and belligerent in nature.

Doolittle (1988) traces the emergence of Sonoran statelets to in situ population growth; he notes that in the Río Sonora project survey area, room counts increased from 224 (in his early phase) to 1289 (in his late phase). Pailes (1984), in contrast, believes that immigration (possibly from the northern Sonora–Chihuahua border area) and regional interaction were important factors in the rise of social hierarchies.

Both Pailes (1984) and Doolittle (1988) argue that the Río Sonora culture continued into historic times, becoming the Opata. I would like to

revive a hypothesis once put forward by Riley (1987, p. 48): that the Opata were descended—at least in part—from Casas Grandes. The Río Sonora social hierarchy emerged at a time when the Casas Grandes network was expanding westward. The resulting demographic compression could explain the emergence of small but feisty local hierarchies. This same process may have intensified when the Casas Grandes area was abandoned, after A.D. 1400—its survivors shifting west into Sonora. Such events would explain historic language patterns in northern Sonora, in which Opata displaced Pima and Eudeve.

Concepción Basin: The Trincheras Area

At about A.D. 200, Archaic peoples of this area began to make plain brown and purple-on-red pottery, becoming the Trincheras culture. The complex was centered on the Río Concepción basin (Sauer and Brand, 1931) but extended east to the Río San Miguel (Braniff, 1978, 1985), northeast into the Río Santa Cruz valley, and south to below Puerto Libertad.

The best occupation sequence, by Bowen (1976a), is derived from the Concepción basin itself. During the initial ceramic period (A.D. 200?–800), sites had a fairly simple assemblage, including plainwares, that probably reflects an economy based on foraging and limited farming. From A.D. 800 to A.D. 1300, purple-on-red and crude polychrome wares were added, and the manufacture of shell ornaments became an important local craft. Pottery and shell were traded out. Irrigation farming was probably adopted at this time (Bowen, 1976a). The La Playa site (Johnson, 1963, 1966) dates to this period and included extensive shell workshops. Houses were shallow pit structures (McGuire and Villalpando, 1989).

About A.D. 1300, according to Bowen (1976a), a marked change took place in the local occupation. A new form of site appeared—the *cerros de trincheras*—roughly conical hills covered with artificial terraces on which houses were built. Imported wares, previously absent, were now imported (including Salado and Casas Grandes polychrome styles). At this time, Trincheras Culture decorated wares began to die out, being replaced by local brown wares.

The sequence defined by Bowen comes to an end at A.D. 1450, primarily because there are no diagnostic pottery types for the period that follows. Local peoples continued to use the area, making brown and red pottery; with the arrival of the Spanish, they became known as Papago (Hinton, 1955; McGuire and Villalpando, 1989).

Additional archaeological research is under way in the Río Altar valley (McGuire, 1986) and should greatly expand on the reconstructions proposed by Bowen.

The most complete settlement pattern data for the Trincheras culture come from the Río San Miguel Valley, where Braniff (1978, 1985) carried out a survey and limited excavations. Braniff's sites can be classed as Trincheras culture, although they are not necessarily identical to those in the Concepción basin.

Braniff found four types of site. Hamlets have one or more rectangular rooms; foundations are single alignments of stones that supported adobe walls. Low trash mounds are also sometimes present. Hamlets were built on mesas overlooking the valley floor. *Cerros de trincheras* are also present. The third site type consists of traces of structures built against the bases of tuff outcrops. Finally, prehistoric and historic pictograph sites occur in overhangs along the river bed near Cucurpe (Braniff 1978, 1985). These data are consistent with a *ranchería* settlement pattern; based on early historic accounts, I suspect that small villages were also present but were obscured by later mission activity.

Braniff (1985) also reviewed site survey records for the Concepción Basin, and concluded that a site hierarchy is present. Both small and large sites occur and one location, Cerro de Trincheras (the type site), was probably a social center for the drainage.

Many workers are drawn to the obvious—but still unexplained—relationship between the Trincheras culture and the Hohokam to the north. For example, Trincheras and Hohokam rock art are almost identical (P. Schaafsma, 1980, pp. 100–101; Ballereau, 1987). Decorated wares from the two areas share stylistic elements but differ greatly in technique. And certain characteristic Hohokam elements (such as ball courts) are missing from the Trincheras culture area (McGuire, 1988).

My own gloss of the problem is that Hohokam and Trincheras were “sibling” cultures, developing from a single Archaic base (the Cochise culture) and maintaining ties while following separate social and economic paths for about a thousand years. Then, after A.D. 1300, the two cultures converged (cf. McGuire and Villalpando, 1989). If nothing else, this viewpoint is consistent with the distribution of northern Piman-speakers in early historic times.

Far Northwest Sonora

Far northwest Sonora can be defined as the area west of the Concepción drainage basin. It is an extremely hot, barren area, with most sites clustered

along the coast or in the Sierra Pinacate. Trincheras Culture sites end near Sonoita; the lower Río Sonoita valley was uninhabited (Ives, 1971). At the mouth of the Sonoita and on sites west of the river, Lower Colorado Buff Wares predominate (Gifford, 1946, Ezell, 1955). Based on historic patterns, these were probably trade vessels used by Piman-speakers, not evidence of Yuman occupation.

Coastal sites are middens that include shell, pottery, and chipped and ground stone tools (Gifford, 1946; J. Foster, 1975). Besides buff wares from the lower Río Colorado valley, pottery included Hohokam and Trincheras types. Most shell appears to be from food species (J. Foster, 1975), indicating that the sites were used mainly as camps for littoral foraging.

Inland from Adair Bay, Hayden (1967, 1976a) has documented a ceramic period occupation in the Sierra Pinacate volcanic field. The first phase of the period, Amargosa III, reflects the adoption of pottery (probably all traded in) by the local Archaic group about A.D. 300. This is commonly Lower Colorado Buff Ware or Trincheras Culture pottery; Hohokam sherds are rare. After A.D. 1200, the Pinacate inhabitants began using only Lower Colorado pottery (Hayden, 1976a).

Sites were semipermanent camps around bedrock tanks; features included rock windbreaks and large rock-alignment figures. Shell tools and debitage are present, but shell ornaments were largely absent. Occupation continued into historic times, as a single Papago band of foragers (Hayden, 1967, 1976).

Farther west, the delta of the Río Colorado was home to Yuman-speaking groups in recent centuries (Alvarez de Williams, 1983); it must have supported an extensive prehistoric occupation as well. However, there are no archaeological studies of this part of Sonora. As is too often the case for northwest Mexico, we simply have no information.

FROM DESCRIPTION TO EXPLANATION

From the summary just presented, it should be clear that the available information for Chihuahua and Sonora is both sketchy and uneven. In many cases, the problem is compounded because original field data have not been published. As a result, any synthesis of the area relies on summary statements that may or may not have been fully tested against the archaeological record.

Despite this shortage of information, it is still possible to define broad patterns of regional prehistory. The same basic periods (Paleo-Indian, Archaic, and Ceramic) occur on both sides of the border. As in the southwestern United States, northwest Mexican prehistory is marked by the emergence of a diversity of local agricultural societies and by the florescence and collapse of supravillage social networks. "Southwesternists" who ignore

this information are depriving themselves of data that will shed light on their own research questions, no matter where in the region they work.

In the main part of this essay, I have emphasized description over theory, because this is, after all, a brief introduction. However, a lack of information has not prevented scholars from moving beyond description toward explanation. In fact, there has probably been a more consistent theoretical orientation in northwest Mexico than there ever was in the southwestern United States. This concern, stated in its simplest form, is the role of Mesoamerica as an agent for change in Northern Mexico.

The debate on Mesoamerican–Northern Mexican interaction has swung back and forth several times over the past century (Kelley, 1966). Initial belief in cultural continuity gave way, by the 1930s, to a sense that Mesoamerica had little or no role in Northern Mexico. It appeared, in fact, that there was a large geographic gap between the two regions (Brand, 1935; Mason, 1938). Two decades later, beliefs were again reversed: Lister (1960) could declare that the “so-called gap” had been closed. Then, using his 1959–1961 field research as a soap box, Di Peso (1966, 1974, 1979) interpreted all of Northern Mexican prehistory in terms of direct Mesoamerican intervention. The unfortunate consequence of Di Peso’s statements was a polarization of debate for two decades, some scholars espousing a strong Mesoamerican role in the region and others completely rejecting the notion (Plog *et al.*, 1982).

Today, such extreme positions have been abandoned, and the volume of debate has died down. A few paragraphs should be enough to indicate the issues currently involved.

To begin with, it is clear that the early Ceramic period culture of Northern Mexico was derived from that of Formative Mesoamerica (Kelley, 1966). Specific elements that began spreading northward prior to A.D. 300 included the use of cultigens (maize, beans, squash), the making of pottery, and the habit of living in formal villages—in other words, defining characteristics of aboriginal culture in the region. However, there is no evidence that this was directed change—instead, Mesoamerican elements were passed from village to village and from culture to culture.

The mechanism for this process was a chain of archaeological cultures that stretched from central Mexico to the U.S. Southwest. At the very least, this settlement chain extended up the east flank of the Sierra Madre, as reflected in similarities among Loma San Gabriel, early Casas Grandes, and the early U.S. Mogollon. This Durango–Chihuahua corridor appears to have lasted until A.D. 1450, when the Casas Grandes area was abandoned. In Sonora, a similar corridor existed on the west flank of the Sierra in late prehistoric times (Pailes, 1978), but we do not yet know whether it was in place during the initial northward spread of Mesoamerican elements.

After A.D. 300, the continued ties between Mesoamerica and Northern Mexico are evident in the spread of additional cultural elements from the former to the latter (cf. Huary, 1945, 1976). Also, emerging Northern Mexican leaders often had a specific sense of the Mesoamerican way of doing things (as shown by ritual ball courts and platform mounds), which could not have been due to blind, down-the-line spread of elements. Finally, actual Mesoamerican items were sometimes traded deep into Northern Mexico (e.g., Di Peso, 1974, pp. 622–624). It would appear, then, that contacts between the two regions had intensified.

For years, however, efforts to analyze this relationship were self-defeating. Scholars sifted through large amounts of southwestern U.S. data for those few items which—taken out of context—resembled equally carefully selected elements from Mesoamerica (e.g., Ferdon, 1955; Reyman, 1978). It is no surprise that such exercises point to an extensive Mesoamerican presence in Northern Mexico; the same approach would most likely yield parallels between any two regions of the globe. It is probably best to conclude that despite the efforts put into them, such studies proved nothing at all.

In the past few years, many scholars working on the problem have moved on to a new approach: application of Wallerstein's "world systems" concept, in order to understand Mesoamerican–Northern Mexican interaction as a process in itself [several typical essays are given by Mathien and McGuire (1986)]. While this appears to be a giant step forward, I am afraid that instead it is another dead end. When the "world systems" concept is taken out of context and applied to Mesoamerica and Northern Mexico, it becomes little more than an assertion that there was an ongoing, unequal relationship between the two regions. As such, the concept does not bring us any closer to explaining our data than we were before.

The answer to this problem does not lie in creating new models, but in adequately testing the hypotheses that have already been advanced. It is possible to identify the outposts of Mesoamerican civilization in northwest Mexico, namely, the Aztatlán culture in Sinaloa and the Chalchihuites culture in Durango (Meighan, 1971; Kelley 1971). By defining the occupations at these known sites and by then moving northward, archaeologists can document the extension or loss of unified patterns of economic, social, and ritual behavior. In turn, the distribution of such patterns (and not of isolated elements) will tell us the extent and nature of Mesoamerican involvement in Northern Mexico.

If such an approach is taken, I believe that it will, in the end, show that direct Mesoamerican intervention in Northern Mexico was limited. The reason for this belief is best illustrated by data from Paquimé. Di Peso argued that Mesoamerican merchants traded and resided at the site and used it as a base for controlling events in the surrounding region; yet he found almost no

Mesoamerican artifacts there (McGuire, 1980), and no physical anthropological traces of such traders in a large skeletal population (Di Peso, 1974, p. 752). Thus, although the site of Paquimé contains culture elements clearly derived from Mesoamerica, there is no evidence to date that Casas Grandes—as a regional florescence—was “caused” by Mesoamerican actions.

Outside centers such as Paquimé, the relationship was even more tenuous. As one moves away from actual Mesoamerican settlement zones into adjacent “rural” areas of Northern Mexico, the dropoff in Mesoamerican-inspired architecture, artifact styles, and trade goods is quite rapid.

It would appear, therefore, that the chief Mesoamerican concern was to exploit (or expand into) immediately adjacent lands, rather than to reach hundreds of kilometers into the barbarian wilds. And by A.D. 1350 to 1450, the process was reversed: the Mesoamerican frontier lay farther and farther from contemporary centers in Northern Mexico.

The irony of the century-long concern with interregional processes is that, for all but a handful of sites in Chihuahua and Sonora, such a concern is irrelevant. The typical inhabitants of northwest Mexico were subsistence farmers who owed their basic culture to Mesoamerica but who had no interaction with that civilization in their daily life. To explain the culture of such farmers, we need to define it as a local response to primarily local conditions. Admittedly, there are sites where direct Mesoamerican intervention must be considered, but these are the exception, not the rule.

I believe, therefore, that it is time to adopt a new unifying focus for research in northwest Mexico: the definition and explanation of cultural variability within the region, from Paleo-Indian to historic times and from Paquimé to desert nomads. In this approach, Mesoamerican intervention must take its place alongside other causal factors such as environmental change, population growth, and the emergence of intervillage networks. The approach would resemble early Southwestern U.S. efforts at cultural historical reconstruction, but only superficially—where once the emphasis was on placing elements in time and space, and on a normative view of culture, today the stress should be on understanding variability (within as well as between groups) by using ecological and economic models of historical change.

The greatest benefit of this approach would be to widen the focus of field research. Instead of being drawn to the few sites with possible Mesoamerican ties, scholars would have reason to investigate the many subsistence-oriented cultures that, so far, are usually ignored. In turn, a better understanding of all the prehistoric cultures of northwest Mexico can only sharpen our appreciation of the true nature of Mesoamerican-Northern Mexican interaction.

I believe that we have everything to gain, and nothing to lose, by making such a change. Prehistoric Chihuahua and Sonora were not a mere extension of cultures to either the north or the south, but a vast area that must be

studied in its own right. Certainly, until we take such a step, our understanding of culture change—as a regional process—will never be complete.

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